

WITH THE FARMERS

By Prof. W. F. MASSEY



September 25, 1913.
Rules for Handling Manure.
"Provide water-tight floors and gutters back of animals. Use bedding enough to absorb all liquid excrement. When the fields are fairly level and the manure as fast as it is made, where it is impossible to haul manure directly as it is made, pile it in large compact piles, round or rectangular, but with perpendicular sides and at least six feet high. Keep the manure heap compact and moist. When stored in a shed, it is also necessary to keep the mass compact and moist. When the manure must be stored, mixing the excrement of the different classes of animals will help insure a moist mass. Reinforcing the manure with rock phosphate (forty pounds per ton) and with superphosphate (twenty pounds a ton) is sound practice. Sprinkling these materials in the gutters or on the manure at the rate of one to one and a half pounds per 1,000 pounds of animal weight is also good practice."

These rules are good, but in our climate it is seldom necessary to store manure during the winter, especially if there will be some loss. Where animals are in box stalls the manure will keep well from the constant tramping. But when once loosened up the manure should go directly to the field whenever it is possible to haul on the land. I have seen a good farmer hauling and spreading manure between the cotton rows in August, and he got a splendid stand of crimson clover among the cotton, and a good top crop of cotton.

Where one has grass, that is the best place probably to haul the manure during the winter, especially if the soil is to be turned for corn in the spring. And there is no doubt that the application of the raw pulverized rock phosphate will greatly increase the efficiency of the manure. At the Experiment Station it was found that it nearly trebled the crop over that from untreated manure. I found in Albemarle that the red clay would never get solid in the barnyard if the manure was allowed to accumulate there, and I had always a mucky yard. I macadamized the barnyard with rock and then determined that there should be no manure left there. Keeping a large stock both of mules and horses, and hauled cattle, I had always half a day's work for a man and team every day hauling the manure out and spreading it on the grass soil, and the barn lot was always clean enough for a woman to walk over, and the manure went out where there were plant roots waiting for it. When it was impracticable to haul on the fields, the manure was piled near-by and hauled over to pack it down in a flat heap until it could be spread. Throwing manure over a stable and then behind the animals to reach in the rain under the eaves is a common sight, and is the cause of great loss to farmers in many places, and hauling it out as I have seen in Albemarle, and forking it off the wagon in little piles over the fields, is one of the worst ways to handle manure. It involves three times handling, and then makes spots in the field, where the grain will lodge from too rank a growth. The manure spreader is an indispensable implement where the land is not too steep for its use. I found in Albemarle that I had little land on which I could use the manure spreader, because of the steepness of the hills. I could not haul straight up the hills, and if I hauled around the contour of the hills, the manure went out in streaks. But on level lands the manure spreader is a wonderful saver of labor, and should be one of the farm implements.

A Late Growth of Peas.
Henrico County: "Having bought a nice farm, I have been reading with great interest your valuable articles on farming. I am editing out each day's publication, and will make an indexed book of them for future reference. These articles alone I consider worth more than twice the price of the paper to any farmer who is willing to use his head. I have twenty-five acres in Unknown cowpeas, sown about the 1st of July on wheat and oat land. I was anxious to get them off or disked down in time for German clover, but I do not think they will stop growing or start to ripen before frost."

Part of the land is sandy and part red soil, but all red subsoil. Some of the peas are very heavy and the remainder are above the average. They are very green and are growing at a tremendous rate. Will you please advise what is best to do under the circumstances? I do not need them for

hay, and am anxious to enrich the land and willing to spend the necessary money on the best plan."
The Unknown pea, also often called the Wonderful, is the latest of the cowpea family. It is a tremendous vine-maker, and makes a great hay crop where it matures well, but is better suited to more Southern conditions. That the peas, been sown early in June, instead of July, you would have probably matured the crop, but it is too late a pea to sow here in July. I have carefully considered the situation, and believe that the best thing you can do for the land will be to choose the peas both ways with the disk harrow and then plow them under, and apply 1,000 pounds of freshly-slaked lime an acre after the plowing. Then put the land in the order of the harrows, and sow the clover seed fifteen pounds an acre. The green peas will make such a fermentation in the soil that sowing the clover will be necessary to prevent souring the soil. I am glad that you like these articles, and wish that I could get the attention of every Virginia farmer. Those who find these columns helpful could do good by calling the attention of the neighboring farmers to the paper.

Results From Fertilizers.
Halifax County: "I am watching to get results of my treatment of a piece of land, and have drawn some conclusions from the results, and wish to have your opinion. This experimental piece is only one and a quarter acres. It had been fertilized and cultivated in tobacco, then seeded to wheat, which was dressed with manure in winter, and timothy and mammoth clover sown in spring, and no timothy, but a fair growth of clover, which was made into hay. Thought then to put it in alfalfa, and prepared it well and applied a sack of 224 pounds of muriate of potash and 1,200 pounds of basic slag phosphate. As I could not get lime, I sowed the land to crimson clover, and made a good crop, but nothing extraordinary. Cut this clover for hay, and planted corn spring of 1912, and the drought made the corn nearly a failure. Corn was cut and put in silo, and the land seeded to a mixture of tall meadow oats grass, orchard grass, herds grass and red clover. Having applied so much previously, I gave the grass only a little bone meal. No crop harvested from this land has given evidence of the heavy application of mineral plant food, and my conclusion is that no crop can consume more than a given amount of mineral fertilizer, and that if more is applied than can be assimilated it becomes more or less unavailable, and does not give results sufficient to pay for the investment, and that the only profitable way to use commercial fertilizers is to make moderate and frequent applications. What is your opinion?" I have tried to cut out the essential facts from your long letter. It seems to me that one thing is shown, and this is that your land did not need the bone meal, and that the heavy application of basic slag, which carried 450 pounds of free lime, would have released all the potash needed, from the abundant store that your soil contains. Then you took a crop of wheat off, and then a crop of clover, and hay was removed from the land, and it was somewhat reduced when you applied the potash and phosphate. You made a good crop of the crimson clover, and think that off the land was carried off a very considerable part of the mineral fertilizers that had been used, and the corn was practically a failure. Basic slag is more slow in becoming available in the soil than acid phosphate is, and it seems to me that you got about all you could expect from it, and will now in the grass get the greater residual effect. Clover taken twice from the land removed a large amount of phosphate. Then, too, one experiment does not prove anything finally, for the seasons interfere so at times that you do not get the effect from the fertilization expected, and even the nitrogen was lacking in your case. If you took the clover off the land you did not leave more than it would naturally have gotten from the soil, so that the growing of the clover was no particular benefit to the land, unless you had returned the manure made from feeding it, and the land evidently needed more nitrogen than it received, and the corn, poor as it was, further depleted this. You robbed the land in crops taken off and no manure returned, and the result simply shows that you got all that could be expected from the one application.

San Jose Scale Probably.
"My apple trees, that are just beginning to bear, are dying with something that looks like mould on the body of the tree and limbs, and if I scrape the outer bark it looks red between that and the wood. Would like to know what to do for it?" From your description, it looks as though you have a very bad attack of the San Jose scale insect for the tree. The scale insect that sticks closely to the bark and makes the whole look moldy.
A tree that is completely infested is probably too far gone to save, and in these days no fruit trees are safe unless carefully sprayed every fall and spring. You can get from dealers the concentrated lime-sulphur, and can make a solution of this and spray the trees this fall and again in spring before the growth starts, or you can make a self-boiled lime-sulphur by slaking ten pounds of lime in a cask, and adding ten pounds of flowers of sulphur so that the heat of the slaking will make the combination. Then add water enough to make sixty gallons, and spray with this several times this fall and next spring. You can use this after the leaves are out too. But from what you say I fear that you will have a hard time to save the trees.

Inoculating With Soil.
"Will soil where bur clover has grown inoculate soil for crimson clover? What is the best time to start Bermuda grass? Can I sow the seed or the cuttings when sowing oats in October?" The only time to start Bermuda grass is in the spring, as it is a hot weather grass, and will not grow in cold weather. You can sow seed, but so far as I have observed, the seed on the market has a low germinating power, and it is better to plant the cuttings in shallow furrows in the spring, about two feet apart, and cover lightly, and they will soon cover the ground. You cannot inoculate land for crimson clover from land where bur clover has grown. Bur clover is not a clover, but is a medicago, and closely kin to alfalfa, which is also a medicago, and it will inoculate the soil for alfalfa. The true clovers all belong to the trifolium family, and will inoculate for each other. In your warmer Tidewater section I have no doubt that the little gray-headed rabbit-foot clover grows, and if so you will need no further inoculation for crimson clover. It grows plentifully where I live, and no one ever inoculates for crimson clover, but it thrives wonderfully well.

CHANGE PLAN OF REPRESENTATION

Dr. McKim Heads Movement for New Membership for Episcopal House of Deputies.

PRESENT SYSTEM IS UNJUST

Virginia's and Other Large Dioceses Are Greatly Discriminated Against.

New York, September 24.—The General Convention of the Protestant Episcopal Church, which meets in New York on October 8, will be the occasion of a determined effort on the part of the larger dioceses in the country to change the plan of representation in the house of deputies. The change will be advocated on the ground that the present plan of representation is unjust, inequitable, undemocratic and un-American.

One of the leaders in this movement is the Rev. Dr. Randolph H. McKim, of Washington, now the president of the house of deputies.

Agitation Is Started.
At the annual convention of the Diocese of Washington, which was held in May of this year, Dr. McKim introduced resolutions, which were adopted and which have served to start the agitation that may come before the convention.

In the preamble to his resolutions, Dr. McKim set forth that under the system of representation now existing in the church, dioceses that have less than 3,000 communicants have as many representatives as many dioceses which contain 45,000 or even 90,000 communicants.

May Not Reflect Sentiment.

"Legislation adopted under these conditions," said Dr. McKim yesterday, "may utterly fail to reflect the mind of the church, and may, therefore, fail to command the loyal support of the several dioceses. Moreover, should any vital issue of Christian doctrine or ritual, or ecclesiastical policy, upon which the mind of the church was sharply divided, be decided by a technical majority of votes which really represented a small minority of communicants, the peace and unity of the church is seriously imperiled."

"There is a widespread demand that our present undemocratic and un-American system, which is a travesty upon representative government, shall be changed."

Equal Representation.

"By agreeing upon a certain number of clergymen in a diocese as the unit, in a vote by dioceses and orders, and by adopting the fractional system of voting in the smaller dioceses, it is possible to approximate equality of representation without reducing or increasing the present number of deputies from the dioceses. The representation in the House of Bishops, as it stands at present, approximates sufficiently the principles of the equality of the dioceses, after the analogy of the United States Senate."

"The case has been cited time and time again of the diocese of Lexington, which has twenty-two clergy and 3,387 communicants, and has the same voting power as the diocese of New York, for example, with 412 clergy and 86,250 communicants."

Discriminate Against Virginia.

"Under our present system of representation, the two dioceses of Virginia and Southern Virginia, with 198 clergy, and 21,208 communicants, have in the general convention sixteen votes, while the six dioceses of Kansas City, Indianapolis, Springfield, Dallas, Delaware and Duluth, with 184 clergy and 24,298 communicants, have forty-eight votes. I do not think it necessary for me to refer to any other examples to show the injustice and un-Americanism of the present system of representation." Dr. McKim's resolution was adopted by the convention, authorized a committee of three clergy and two laymen to prepare a memorial to the general convention, asking that body to take immediate steps to remedy the defects. A few weeks later the diocese of Maryland passed similar resolutions, and these were quickly followed by resolutions of the diocese of Southern Virginia.

The convention meets for three weeks in the grounds of the Cathedral of St. John the Divine, and during those weeks the men who want the plan of representation changed will be constantly to carry out their wishes.

DANIELS IS SPEAKER

Makes Address at Associated Press Banquet in Indianapolis.

Indianapolis, Ind., September 24.—By Secretary of the Navy Josephus Daniels, the principal speaker and guest of honor, the banquet of the Indiana members of the Associated Press to-night was held at a local hotel. The banquet hall was decorated with American flags, and back of the speaker's table was draped the flag of the Secretary of the Navy.

Mr. Daniels' stay in Indianapolis was brief. His train was there and a half hour later not arriving until 3:30, and he was to start on his return to Washington at 10:45 to-night. He left for his train shortly after concluding his speech, which was given long applause.

The other speakers of the evening were Governor Ralston, President William Loeve Bryan, of Indiana University, and Melville E. Stone, of New York, general manager of the Associated Press. Former Vice-President Charles W. Fairbanks acted as toastmaster.

CLAIM "MOVIES" IN TRUST

United States District Attorney Called Upon to Investigate.

Chicago, September 24.—The offices of United States District Attorney Wilkinson were called upon to-day to investigate an allegation that the motion picture exhibitors' league of America is violating the antitrust law. The complaint was made by Adolph H. Weiner, a lawyer, who declared that the various film exchanges, at the instigation of the league, are beginning to dictate terms upon which theatres may exhibit the films.

Fiscal Adviser to China.
Washington, September 24.—Friends of Henry Carter Adams, professor of political economy at the University of Michigan, say he has accepted the post of general fiscal adviser to the republic of China.

Two Balloons Entered.
Kansas City, September 24.—The United States will be represented in the international balloon race that starts from Paris October 12 by only two balloons, as a result of the announcement made by John Watts, one of the three aeronauts who qualified in the elimination races, that he would not go to Paris because of inability to obtain a suitable balloon.

Garner—Miller.
Stannardsville, Va., September 24.—Mrs. Carrie J. Miller, of Stannardsville, and Charles S. Garner, Sr., of Baltimore, were married last Wednesday afternoon in Washington. Rev. James B. Montgomery performing the ceremony.

Is Your Ingenuity Industrious

What is the Average Number of Titles Mr. Booklover, You Have Found to Each Picture

Figure that out and then decide whether or not your ingenuity is working. If you have been keen and shrewd in solving the pictures you have found several POSSIBLE titles, probably, to each picture. That's what to submit—ALL your ingenuity. To-day's contest story discusses that.

How to Fit the Ten Starred Titles in the Catalogue to the Ten Circled Pages in the Answer Book

FIRST. Go through the new Contest Catalogue, which is an alphabetical list of book titles with the names of their authors, and from which have been selected the titles to the seventy-seven pictures, and you will find ten of the titles marked for you with a star. These are ten correct titles.

SECOND. Then look in your Answer Book and you will find a large circle on the top of each of the ten pages.

THIRD. The ten starred titles in the Catalogue fit the ten pages of the Answer Book with the circle. Now paste the daily picture in its proper place in the Answer Book, and the ten circled pages will contain the pictures that fit the "stars."

FOURTH. That's all there is to it. All you really have to do is to tell the book titles to sixty-seven pictures.

FIFTH. The ten starred titles in the Catalogue fit the ten circled pages in the Answer Book.

\$1200 IN GOLD

Will be given away absolutely FREE by The Times-Dispatch in its great Booklovers' Contest Game.

You Don't Have to Work for this Money.

You Don't Have to Get Out and Solicit Subscriptions.

You Simply Play a Pleasant, Easy, Fascinating Game.

You Simply Tell the Book Titles to 77 Pictures.

You get all the pictures published to date free with the catalogue and answer book. This catalogue is sold at 35 cents and 40 cents by mail and it contains all the correct titles to the 77 pictures.

FIRST PRIZE\$300 IN GOLD
SECOND PRIZE\$200 IN GOLD
THIRD PRIZE\$150 IN GOLD
FOURTH PRIZE\$100 IN GOLD

There are fifty prizes in all, totaling \$1,200.00 in gold. You start in this great free game to-day. You can win and easily, too.

GET AN ANSWER BOOK (it contains 77 double pages) AND 35 PICTURES FREE

You can make ten answers to each picture, yet only need but one copy of each picture.

On the upper page you paste a picture. On the lower section you write from one to ten book titles which you have selected for the picture pasted above.

You save time, labor and expense with an Answer Book, and it helps you to win.

USE THIS ORDER FORM FOR THE ANSWER BOOK.

....., 1913.

Booklovers' Contest Editor,

The Times-Dispatch:

Find herewith 80 cents (75 cents at office), for which deliver to me your Answer Book and six certificates, returnable as the pictures appear in the contest for Pictures Nos. 36 to 70.

Name

Street and No.

City State

Do not send stamps or silver. Send check or money order.

USE THIS ORDER BLANK FOR CATALOGUE

If you cut this order form, fill it out and send or bring it in with the sum designated, you will receive the Official Copyrighted Contest Catalogue of about 5,000 book titles, and seven certificates redeemable for the first thirty-five pictures in the contest. In the catalogue are all the correct titles to the seventy-seven pictures. Catalogue, 35 cents at this office, 40 cents by mail.

Do Not Send Stamps or Silver. Send Check or Money Order.

Booklovers' Contest Editor,

The Times-Dispatch:

Inclosed find 40 cents, for which send me a Booklovers' Contest Catalogue of about 5,000 book titles and the seven certificates redeemable for the first thirty-five pictures.

Name

Street and No.

City State

The Times-Dispatch's Great \$1200.00 Gold Booklovers' Contest

Picture No. 61 Date, September 25th.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

HOOPING-COUGH
OR CROUP
The Celebrated Efficacious Remedy
Roche's Herbal Embrocation
Will also be found very efficacious in cases of
BRONCHITIS, LUMBAGO AND RHEUMATISM
Edwards & Son, London, England
All Druggists or E. F. Pomeroy & Co.,
60 Beckman Street, N. Y.

Wood's High-Grade Farm Seeds
Best Qualities Obtainable
We are headquarters for
Seed Wheat, Oats,
Rye, Barley, Vetches,
Alfalfa and all
Grasses & Clovers.
Write for Wood's Crop Special
giving prices and seasonable in-
formation about Seeds for Fall
sowing.
T. W. WOOD & SONS,
Seedsmen, - Richmond, Va.
Wood's Descriptive Fall Catalogue
gives prices and information about all
Garden Seeds for Fall Planting.
Mailed free on request.

What Book Does This Picture Represent?
Write Title and Name of Author in Form Below
Title
Author
Your Name
Street and Number
City or Town
TOTAL NUMBER OF PICTURES, 77. Contest began July 27th. Each day a different picture appears in this space. Cut them out. Save them until the last picture appears on October 11th. Don't send in partial lists. Wait until you have all the answers to the 77. Read Rules, Daily Story and Special Announcements in another part of paper. It will help you win a prize. Extra pictures and coupons of any date that have appeared may be had at 2c. Enter to-day without registering your name. Merely Save Pictures and Coupons as they appear.
The principal features in connection with this contest are copyrighted by the Booklovers' Contest Co., San Francisco, Cal.